

REMARKS

Claims 1-25 have been resubmitted. Claims 1, 11, 17, 18 and 25 have been amended. No new claims have been added.

Claims 1-4, 7-11, 14-22 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Largman in view of McGregor. Claims 12 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Largman in view of McGregor and further in view of Dalton. Claims 5-6 and 23-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Largman in view of McGregor and further in view of Huey.

Examiner Interview

An interview with the Examiner, Elizabeth Cole, was conducted on September 17, 2003. Although a consensus was not reached, the Examiner stated that amending the claims to include a degree of expansion of the microcells as a feature of the independent claims may create allowable subject matter. The claims have been amended in view of this discussion.

Section 103 Rejections

Largman

Largman relates to a trilobal or quadrilobal fiber formed from thermoplastic polymers, where the fiber includes a cross-section. The cross-section includes a central core having three or four T-shaped lobes, where the legs of each intersect at the center of the core. (Abstract).

McGregor

McGregor relates to a multiple layered insulation material with discrete fibers having energy expandable thermoplastic microspheres interspersed and contained therein. The expandable microspheres allow for the introduction of unexpanded microspheres into pre-constructed insulation; and expansion of the microspheres within the insulation to a diameter great enough that the microspheres are retained in place.

The Examiner cites to Largman due to its disclosure of a plurality of fibers having a non-circular cross section comprising a plurality of lobes. The Examiner concedes that Largman, however, does not disclose incorporating expandable microcell into the fiber material. The Examiner cites to McGregor for incorporating expandable microspheres into a fibrous insulation material and then expanding the microspheres into a fibrous insulation material.

As set forth above, independent claims 1, 11, 17, 18 and 25 now recite the intra-fiber voids and inter-fiber voids, where adjacent T-shaped lobes each having a leg and a cap that define the at least one intra-fiber void having a diameter larger than the distance between the adjacent caps. Moreover, the expanded microcell expands to a degree where its diameter is larger than the distance between the adjacent caps. The expansion of the microcell according to the present invention creates increased microcell retention due to improved contact between the microcells and fibers. Although, McGregor suggests expansion of the microspheres to cause some retention with a fiber, it lacks any teaching or suggestion to expand the microcells in a manner as now claim in the present invention. Neither Largman nor McGregor teach or suggest the expansion of microcells to the degree as now recited in amended claims 1, 11, 17, 18 and 25.

Accordingly, even if one skilled in the art were to combine Largman and McGregor, one would not achieve the subject matter of amended claims 1, 11, 17, 18 and 25. Largman and McGregor fail to teach each and every element of the amended claims 1, 11, 17, 18 and 25; specifically Largman and McGregor do not teach the expansion of the microcells to a degree where its diameter is larger than the distance between the adjacent caps of a lobe. Therefore, the combination of Largman and McGregor does not render the present invention obvious and cannot support this obviousness rejection.

The underlying dependent claims 2-10, 12-16 and 19-24 depend from amended claims 1, 11 and 18 respectively. Accordingly, the combination of Largman and McGregor cannot render claims 2-10, 12-16 and 19-24 obvious for at least the same reasons as set forth above in regard to amended claims 1, 11, 17 and 18. Furthermore, the further cited prior art, Dalton and Huey, do not cure the deficiencies noted above with Largman and McGregor. Applicant, therefore, respectfully submits that the underlying dependant claims are not obviousness in view of Largman and McGregor for at least the same reasons as set forth above in regard to amended claims 1, 11, 17, 18 and 25.

CONCLUSION

Reconsideration and withdrawal of the Office Action with respect to Claims 1-25 is requested. Applicant submits that the claims are now in condition for allowance.

In the event the examiner wishes to discuss any aspect of this response, please contact the attorney at the telephone number identified below.

Respectfully submitted,

By:

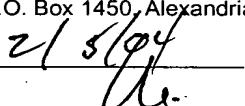


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